



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,477	10/28/2003	Alex Fishman	15436.253.73.1.1	5594

7590 06/23/2005

Fraser D. Roy
WORKMAN NYDEGGER
1000 Eagle Gate Tower
60 East South Temple
Salt Lake City, UT 84111

EXAMINER

TSAI, CAROL S W

ART UNIT	PAPER NUMBER
----------	--------------

2857

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,477

Applicant(s)

FISHMAN ET AL.

Examiner

Carol S. Tsai

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-20 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-7, 9-11 and 15-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/29/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-7, 9-11 and 15-19 are objected to because of the following informalities:

In claim 1, line 5, "unknown propagation delay," should read

- - unknown propagation delay; - -.

In claim 9, line 16, "generating steps;" should read

- - generating steps; and - -.

In claim 15, line 14, "generating steps;" should read

- - generating steps; and - -.

Appropriate correction is required.

Specification

2. The use of the trademark (see pages 2 and 8-11) has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Conclusion

3. This application is in condition for allowance except for the following formal matters:
Objections to claims and Specification.

Art Unit: 2857

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Alvarez, III et al. disclose a method and apparatus are disclosed for acquiring transmit synchronization at a secondary station with the periodic frame reference bursts from a reference station in a TDMA network in an improved manner to enable the use of full power initial acquisition bursts while also reducing the bandwidth required to complete the initial acquisition operation.

Carbrey discloses a loop network in which the ports have access to time slots on each of two buses.

Fuhrmann et al. disclose a process for reducing the amount of overhead data in ATM cell headers prior to transmission both upstream and downstream on an HFC cable plant or other transmission media using SCDMA on at least the upstream path, without loss of either IP or Ethernet addressing information.

Drinkard et al. disclose a clockless time-of-flight interval timer including a tapped delay line register comprising N buffers that each contribute a substantially identical incremental time delay.

Kikuchi et al. disclose a transponder which may form part of communication

Art Unit: 2857

device such as an optical transmitters device includes an optical receiver for receiving a high speed optical information signal and for converting the high speed optical information signal to an electrical signal, a demultiplexing circuit for separating the electrical signal into a plurality of low speed information signals, a plurality of optical transmitters each of which converts one of the low speed electrical signals into an optical signal of mutually different wavelengths, and a propagation delay difference compensating circuit.

Rakib et al. disclose a system for bidirectional communication of digital data between a central unit and a remote unit wherein the need for tracking loops in the central unit has been eliminated.

Dent discloses an apparatus and method for ciphering traffic exchanged in both directions between a satellite/cellular telephone and a ground station network using an orbital satellite.

Allowable Subject Matter

5. Claims 1-20 are allowed.

6. The following is a statement of reasons for the indication of allowable subject matter:

U. S. Patent No. 6,851,086 to Szymanski is the reference closest to the claimed invention. Szymanski discloses a system for measuring a signal propagation delay, said system being adapted to electrically communicate with at least one transmitter and at least one receiver, said system comprising: a first bit sequence generator used to generate a first sequence of bits that is to be transmitted through an object with an unknown propagation delay, a second bit sequence generator that receives said first sequence of bits from said object, said second bit

Art Unit: 2857

sequence generator generating a second sequence of bits identical to said first sequence.

However, Szymanski does not teach a controller that receives said first and second sequences of bits, said controller compares said sequences to confirm that said sequences are identical, instructs said first bit sequence generator to inject a predefined bit error into a third sequence of bits while simultaneously starting a clock count from a clock source, maintains said count that is incremented each time said controller checks for said bit error, stops incrementing said count when said bit error is detected, and computes said propagation delay by reference to said count; and including all of the other limitations in the respective independent claims.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. W. Tsai whose telephone number is (571) 272-2224. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2857

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).



Carol S. W. Tsai
Primary Examiner
Art Unit 2857

cswt
June 14, 2005